UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,975	03/01/2002	Yakov Kamen	007287.00037	9048

22907 7590 09/01/2011

BANNER & WITCOFF, LTD.
1100 13th STREET, N.W.
SUITE 1200
WASHINGTON, DC 20005-4051

EXAMINER	
PENG, FRED H	

ART UNIT	PAPER NUMBER
2426	

MAIL DATE	DELIVERY MODE
09/01/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/087,975	KAMEN ET AL.	
	Examiner	Art Unit	
	FRED PENG	2426	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 June 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-4,10-13,19-22 and 25-40* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-4,10-13,19-22,25-28,30-33 and 35-40* is/are rejected.

8)☒ Claim(s) *29 and 34* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *30 August 2010* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. In view of the Appeal Brief filed on 06/06/2011, PROSECUTION IS HEREBY REOPENED. New grounds of rejections set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

DETAILED ACTION

Status of Claims

2. Claims 1-4, 10-13, 19-22 and 25-40 are pending in this application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 10-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding Claims 10-13, Claims set forth a "computer readable medium." However, the specification as originally filed does not explicitly define the computer readable medium (refer to

Para 23 of the specifications). The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See In re Zletz, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable media (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable media, particularly when the specification is absent an explicit definition or is silent. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal per se, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See In re Nuijten, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101, Aug. 24, 2009; p. 2. This rejection may be overcome by amending the claim to read a "non-transitory" computer readable medium.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 10-13, 19-22 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (US 5,412,377) in view of Saib et al (US 2001/0005905) and Smith (US 2001/0007149).

Regarding Claims 1, 10 and 19, Evans discloses an apparatus (FIG.1A) with corresponding method and computer-readable medium (FIG.2, -23, 25) comprising:

a processor (FIG.2, -13) having a memory (23, 25) coupled thereto, the memory having stored thereon executable instructions which, when executed by the processor, cause the processor to perform a method of when a function is required for a particular device being controlled which is not reflected on the controller keyboard, any of these keys (thus including a number key) may be programmed to perform such function for such device and such function may be marked in the blank space above the key (refer but not limited to Col 4 lines 4-9).

Evans is silent about programming a function based on the depression duration of a key or a button.

In an analogous art, Saib discloses programming a function based on the depression duration of a key or a button (FIG.3, 306, 308, 310, 312; Para 6 lines 1-2; Para 32 lines 1-5; Para 28 lines 1-8).

Further in another analogous art, Smith discloses in one preferred embodiment, the remote control has a processing function to be able to distinguish the control functions selected. For example if a button is pressed for a prolonged period of time the remote control can identify the function, gauge the length of the depression of that button and then generate and transmit a signal to the receiver which is indicative of that function (Para 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Evans' system to include programming a function based on the depression duration of a button, as taught by Saib and Smith to take advantage of a single key programmed for different functions, thus reduce the keystrokes and improve navigation efficiency.

Regarding Claims 2, 11 and 20, Saib further discloses evaluating the depression duration comprises determining depression of button; periodically incrementing a counter during the depression duration; and evaluating the counter value, upon termination of the depression of a button (Para 28 lines 1-3; Para 31 lines 6-10; Para 28 lines 5-7; Para 28 lines 8-12; The CPU acting as a computer function is inherent to perform the counter functionality and evaluate the value).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to evaluate the depression duration with the steps as cited above to take advantage of powerful embedded processor for quick and accurate processing.

Regarding Claims 3, 4, 12, 13, 21 and 22, Saib further discloses the plurality of functions affect a favorite channel list, wherein a plurality of channels favorites are positioned in the list non-sequentially (channel is randomly selected and is positioned non-sequentially), wherein the functions affecting the favorite channel list include one or more of accessing, updating, programming and last channel (refer but not limited to Para 5 lines 2-6; Para 6 lines 5-13; Para 36 lines 7-10; Para 37 lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include plurality of functions affecting a favorite channel list such as jump to the last channel as taught by Saib to provide a quick and convenient access for the user, thus a friendlier and better user interface.

Regarding Claims 25, 26 and 27, Saib inherently discloses selection of channels based on the number keys from a remote control (press "3" button on the remote will select channel 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selection of channels based on the number keys from a remote control so as to provide a convenient way of direct selection of a channel for quick access.

5. Claims 28, 33 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saib et al (US 2001/0005905) in view of Shaffer et al (US 7,181,027).

Regarding Claims 28, 33 and 38, Saib discloses a device controller (FIG.2) with corresponding method and computer-readable medium (FIG.2, -37) comprising:

a processor (FIG.2, -29) having a memory (37) coupled thereto, the memory having stored thereon executable instructions which, when executed by the processor, cause the processor to perform a method comprising:

receiving an indication of a depression of a button on the device controller;

receiving an indication of an ending of the depression of the button;

evaluating a depression duration of the button and classifying the depression duration into two ranges, wherein a first depression duration range is associated with a first function on the device controller, a second depression duration range is associated with a second function on the device controller, and performing the function associated with the depression duration range of the button on the device controller (FIG.3; Para 6 lines 1-2; Para 32 lines 1-5; Para 28 lines 1-8).

Saib discloses a duration threshold to determine a first and second functions but is silent about a third depression duration range is associated with a third function on the device controller.

In an analogous art, Shaffer discloses a first time duration threshold to detect a user's speech and a second time duration threshold, the third duration range to detect the end of the speech (FIG.4; Col 8 lines 59-64).

Therefore, a person of ordinary skill in the art would have had good reason to pursue the known options of further specifying additional duration range for more functions based on design needs. It would require no more than "ordinary skill and common sense" to add an additional range if the circumstance for more functions arises.

Regarding Claims 39 and 40, Shaffer discloses specifying multiple duration ranges for different functions but is not explicit about the fourth range. However, a person of ordinary skill in the art would have had good reason to pursue the known options of further specifying additional duration range for more functions based on design needs. It would require no more than "ordinary skill and common sense" to add an additional range if the circumstance arises for more functions.

6. Claims 30 and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Saib et al (US 2001/0005905) and Shaffer (US 7,181,027) as applied to claims 28 and 33 above, and further in view of Griesau et al (US 6,507,306).

Regarding Claims 30 and 35, Saib discloses a jump key (equated to a channel up key function as the channel jumps to a next higher station number) with the first depression duration range to tune a different channel (Para 33; when the depression duration less than a threshold); Saib further discloses a second range to add or remove the current tuned program into/from the jump loop (Para 34; when duration greater than the threshold). Saib is silent about the second or the third depression duration range associated with a function for changing an operating mode of the multimedia presentation device.

In an analogous art, Griesau discloses programming specific keys by using the second depression duration range (predetermined amount of time) for changing an operating mode of the multimedia presentation device (Col 4 lines 49-62).

Shaffer further discloses a third duration range can be used to define more functions as needed (FIG.4; Col 8 lines 59-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Saib's system to include programming a specific key like jump button associated with a function for changing an operating mode of the multimedia presentation device, as taught by Griesau so additional function can be achieved with the same key.

7. Claims 31 and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Saib et al (US 2001/0005905) and Shaffer (US 7,181,027) as applied to claims 28 and 33 above, and further in view of Coleman et al (US 5,844,620).

Regarding Claims 31 and 36, Saib discloses more than one function can be implemented in a single button based on the depress duration. Saib further discloses a jump function to jump back to the previously viewed channels but not specifically about the latest channels.

In an analogous art, Coleman discloses a last channel button function allow viewers to view the latest ten viewed channels (Col 23 lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Saib and Shaffer to include viewing the last latest viewed channels, as taught by Coleman with a single key stroke to improve the overall reliability of the remote controller usage with less key strokes.

8. Claims 32 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Saib et al (US 2001/0005905) and Shaffer(US 7,181,027) as applied to claims 28 and 33 above, and further in view of Look et al (US 6,757,906).

Regarding Claims 32 and 37, Saib and Shaffer are silent about displaying a progress bar related to the depression duration.

In an analogous art, Look discloses a progress bar related to a program duration (FIG.26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Saib's system to include a progress bar related to the process duration, as taught by Look as an added convenient tool to guide the users.

Response to Arguments

9. Applicant's arguments with respect to claims 1-4, 10-13, 19-22 and 25-40 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

10. Claims 29 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Claims 1-4, 10-13, 19-22, 25-28, 30-33 and 35-40 are rejected.

12. Claims 29 and 34 are objected.

Correspondence Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED PENG whose telephone number is (571)270-1147. The examiner can normally be reached on Monday-Friday 09:30-19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hirl can be reached on (571) 272-3685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred Peng/

Examiner, Art Unit 2426

/JOSEPH P. HIRL/

Supervisory Patent Examiner, Art Unit 2426

August 29, 2011